LAKE OKEECHOBEE WATERSHED PHOSPHORUS SOURCE CONTROL GRANT PROGRAM

Mandate:

Lake Okeechobee Watershed Protection Program (LOWPP)

Background:

Historical and ongoing phosphorus loading into Lake Okeechobee have resulted in increased eutrophication. Currently, phosphorus loading into the lake can be attributed to internal and external sources. Phosphorus-rich sediments are responsible for most of the internal loading, while most of the external loading is associated with phosphorus runoff from the lake's watershed.

The Florida Legislature during the 2000 session identified the restoration of Lake Okeechobee as one of its priorities. As a consequence, the Lake Okeechobee Protection Act was signed into law, and a companion bill provided $38.5 million for restoration activities. One of the requirements in the legislation is the control of phosphorus runoff in the watershed. One strategy was to develop and implement the Phosphorus Source Control Grant Program. The South Florida Management District was charged with the responsibility of administering the program. Thirteen projects for a total of approximately $7 million were approved for funding by the District's Governing Board. An interagency team that includes the Florida Department of Environmental Protection, Florida Department of Agriculture and Consumer Services, Natural Resources Conservation Service, and University of Florida Institute of Food and Agricultural Sciences is participating in the program coordination.

Project Overview:

The grant program has two major components: the grant project component and the engineering oversight component. The grant project component is being administered in four phases: Phase I - Project Selection, Phase II - Implementation and Reporting, Phase III - Operation and Maintenance, and Phase IV - Monitoring and Reporting. Only tasks associated with Phase II and Phase IV are funded. Under the engineering oversight component, the District contracted an engineering firm to verify that implementation of funded projects is performed in accordance with the funding agreement and grant application.

The following projects were selected and approved by the District's Governing Board:

Lake Okeechobee Phosphorus Source Control Grant Program: Davie Dairy, Inc., Okeechobee, Concrete cattle cooling ponds

Lake Okeechobee Watershed Phosphorus Source Control Grant Program: Smith Okeechobee Farms, Inc., Okeechobee - Project: Runoff retention and wetland enhancement

Lake Okeechobee Watershed Phosphorus Source Control Grant Program: Evans Properties, Inc., Vero Beach - Project: Basset Grove surface water runoff storage and reuse

Lake Okeechobee Watershed Phosphorus Source Control Grant Program: Okeechobee Utility Authority, Okeechobee - Project: Vacuum sewer system service for package plants and septic systems in the Ousley Service Area

Lake Okeechobee Watershed Phosphorus Source Control Grant Program: Tampa Farm Service, Indiantown - Project: Chicken manure composting

Lake Okeechobee Watershed Phosphorus Source Control Grant Program: Lofton Ranch, Okeechobee - Project: Lofton Ranch wetland enhancement

Lake Okeechobee Watershed Phosphorus Source Control Grant Program: AquaFlorida, Inc., Okeechobee - Project: Conceptual design of 6,500-acre regional Stormwater Treatment Area (STA)

Lake Okeechobee Watershed Phosphorus Source Control Grant Program: Solid Waste Authority of Palm Beach County, West Palm Beach - Project: Pelletization of biosolids from tri-county wastewater utility operations

Lake Okeechobee Watershed Phosphorus Source Control Grant Program: Candler Ranch, Okeechobee - Project: Candler Ranch runoff treatment using an iron humate filter to bind phosphorus.

Lake Okeechobee Watershed Phosphorus Source Control Grant Program: Hydromentia, Inc., Ocala - Project: S-154 basin aquatic plant based water treatment system prototype.

Lake Okeechobee Watershed Phosphorus Source Control Grant Program: QED Environmental Solutions (Florida), LLC, West Palm Beach - Project: Dairy farm wastewater treatment system

Lake Okeechobee Watershed Phosphorus Source Control Grant Program: Milking "R" Dairy, Okeechobee - Project: Optimization of a stormwater runoff chemical treatment system.

Lake Okeechobee Watershed Phosphorus Source Control Grant Program: Lazy S Ranch, Venus - Project: Lazy S Ranch runoff treatment using an iron humate filter to bind phosphorus.

Anticipated Benefits:

The anticipated benefit of the grant program are threefold: 1) the reduction in phosphorus loading to the lake from the lake's watershed, 2) the inclusion of stakeholders throughout the watershed through a collaborative effort, and 3) the implementation and evaluation of various technologies currently available or proposed for phosphorus reduction.